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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,315	05/04/2006	Yuuichi Iwamoto	VX062738 PCT	6641
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EXAMINER				
LAZO, THOMAS E				
ART UNIT		PAPER NUMBER		
3745				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/578,315

**Applicant(s)**

IWAMOTO, YUUCHI

**Examiner**

Thomas E. Lazo

**Art Unit**

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 November 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-13 is/are rejected.
- 7) ☒ Claim(s) 7 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 May 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Response to Amendment***

Applicant's amendment filed 11/30/09 is acknowledged.

The applicant has overcome the rejection to claims 1, 2, 4, and 7 under 35 USC 102(b) by amending claim 1 and persuasively arguing the rejection of claim 1. The rejection of claims 1, 2, 4, and 7 under 35 USC 102(b) is withdrawn.

The applicant has overcome the rejection to claims 3, 5, and 6 under 35 USC 103(a) by amending claim 1 and persuasively arguing the rejection of claim 1. The rejection of claims 3, 5, and 6 under 35 USC 103(a) is withdrawn.

***Response to Arguments***

Applicant's arguments, see pages 8-10, filed 11/30/09, with respect to the rejection(s) of claim(s) 1, 2, 3, and 7 under 35 USC 102(b) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Mitchell et al. (4,523,892).

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4, 6, 8, 9, 11, and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell et al. (4,523,892) in view of Takamatsu (6,405,844). Mitchell et al. discloses a load control device for an engine of a work vehicle with an engine 15 in which a target speed is set to a value in a range from a low idling speed (standby) to a high idling speed (maximum), a plurality of variable displacement hydraulic pumps 24,26 driven by the engine 15, a plurality of hydraulic actuators 56,58 to which pressure oil discharged from the plurality of variable displacement hydraulic pumps 24,26 is supplied; absorption torque changing means/valve apparatus 28 for changing absorption torque for one or more of the variable displacement hydraulic pumps 24,26, engine speed detection means 46 for detecting an engine speed, and control means 12 for reducing the absorption torque of the variable displacement hydraulic pump 24,26 when the detected engine speed is decreased to a predetermined threshold value (desired engine speed) or lower, wherein the predetermined threshold value (desired engine speed) is an engine speed equal to the low idling speed, the absorption torque changing means /valve apparatus 28 is means for changing maximum absorption torque of the hydraulic pump 24,26, and the pressure oil is supplied from each of the plurality of variable displacement hydraulic pumps 24,26 to each of the plurality of hydraulic actuators 56,58 via each independent oil passage. Mitchell et al. does not disclose the engine driving a driving wheel via a torque converter.

Takamatsu teaches for a load control device for an engine of a work vehicle with an engine 1 and a plurality of hydraulic pumps 15,16 and that the engine 1 drives a driving wheel 7 via a torque converter 3 for the purposes of moving the working vehicle to different locations to do work.

Since Mitchell et al. and Takamatsu are both in the same field of endeavor the purpose disclosed by Takamatsu would have been recognized in the pertinent art of Mitchell et al. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Mitchell et al. to have the engine drive a driving wheel via a torque converter for the purposes of moving the working vehicle to different locations to do work.

Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell et al. and Takamatsu, as applied to claim 1 above, in further view of Ikari (6,176,083). Mitchell et al. discloses all of the claimed subject matter except for a hydraulic actuator for activating a steering mechanism and a hydraulic actuator for activating a work machine.

Ikari teaches for a load control device for an engine of a work vehicle with an engine 1, a plurality of variable displacement hydraulic pumps 2,9 driven by the engine 1, a plurality of hydraulic actuators 6,7,8 to which pressure oil discharged from the plurality of variable displacement hydraulic pumps 2,8 is supplied and that there is a hydraulic actuator 6 for activating a steering mechanism and a hydraulic actuator 7,8 for activating a work machine for the purposes of hydraulically controlling the work vehicle functions.

Since Mitchell et al. and Ikari are both in the same field of endeavor the purpose disclosed by Ikari would have been recognized in the pertinent art of Mitchell et al. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the actuators of Mitchell et al. to have a hydraulic actuator for activating a steering mechanism and a hydraulic actuator for activating a work machine for the purposes of hydraulically controlling the work vehicle functions.

Claim 5 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mitchell et al. and Takamatsu, as applied to claim 1 above, in further view of Yoshimura et al. (6,170,262). Mitchell et al. discloses all of the claimed subject matter except for the absorption torque changing means including the displacement control means controlling a displacement of the variable displacement hydraulic pump such that a differential pressure between a discharge pressure of the variable displacement hydraulic pump and a load pressure of the hydraulic actuator becomes a set differential pressure and means for changing the set differential pressure.

Yoshimura et al. teaches for a load control device for an engine of a work vehicle with an engine (not shown), a variable displacement hydraulic pump 1 driven by the engine, and actuator 2 or 3, and absorption torque changing means 10 for changing absorption torque for the variable displacement hydraulic pump 1 and that the absorption torque changing means includes displacement control means 11 for controlling a displacement of the variable displacement hydraulic pump 1 such that a differential pressure between a discharge pressure of the variable displacement hydraulic pump 1 and a load pressure of the hydraulic actuator 2 or 3 becomes a set differential pressure and means 13 for changing the set differential pressure for the purposes of smoothly operating the actuator with an operating element. See col. 1, lines 5-10.

Since Mitchell et al. and Yoshimura et al. are both in the same field of endeavor the purpose disclosed by Yoshimura et al. would have been recognized in the pertinent art of Mitchell et al. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the absorption torque changing means of Mitchell et al. displacement control means controlling a displacement of the variable displacement hydraulic

pump such that a differential pressure between a discharge pressure of the variable displacement hydraulic pump and a load pressure of the hydraulic actuator becomes a set differential pressure and means for changing the set differential pressure for the purposes of smoothly operating the actuator with an operating element.

*Allowable Subject Matter*

Claims 7 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

*Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thomas Lazo whose telephone number is (571) 272-4818. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Edward Look, can be reached on (571) 272-4820. The fax phone number for this Group is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Thomas E. Lazo/  
Primary Examiner,  
Art Unit 3745  
January 27, 2010